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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,113	12/31/2003	Carl J. Mueller	7578W-000321/US	9587
28997	7590	03/14/2005	EXAMINER	
HARNESS, DICKEY, & PIERCE, P.L.C			NORMAN, MARC E	
7700 BONHOMME, STE 400			ART UNIT	
ST. LOUIS, MO 63105			PAPER NUMBER	
			3744	

DATE MAILED: 03/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No. 10/750,113	Applicant(s) MUELLER ET AL.	
	Examiner Marc E. Norman	Art Unit 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 13-30 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10, 13-19, 21, 25, 27, 28, and 30 are rejected under 35 U.S.C. 102(e) as being anticipated by Jayanth et al.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

As per claims 1-10, 13-19, 21, 25, 27, 28, and 30, Jayanth et al. discloses thermostat 350, compressor 10, current sensor 102 sending a signal from the compressor, compressor lock out (column 11, lines 27-31), control module 104, display alarm (column 6, lines 20-48), stopping the compressor for a predetermined time and then restarting (column 11, lines 31-36), module

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104 sending multiple signals (Figures 2 and 3), and pulse-based signals (column 6, line 49 – column 7, line 7).

Alternatively, claims 1-9, 13-18, 25, 27, 28, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Saunders et al.

As per claims 1-9, 13-18, 25, 27, 28, and 30, Saunders et al. discloses thermostats 12 and 13, compressors 72a and 72b, current signal representing operating condition of the compressor (Abstract, lines 2-4), compressor lock-out (column 8, lines 27-29, 37-38, etc.), control module 10, display alarm (Abstract, lines 6-9; column 8, lines 42-43, etc.), and module 10 generating multiple signals (Figure 3).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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Claims 11 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over either of Jayanth et al. or Saunders et al. in view of Farr.

As per claims 11 and 20, neither Jayanth et al. nor Saunders et al. teaches restarting the compressor a certain number of times and then locking it out if it does not clear. This feature is taught by Farr (see claim 8). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply this feature of Farr to the systems of Jayanth et al. or Saunders et al. for the common purpose of protecting the compressor motor.

Claims 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jayanth et al.

As per claims 22-24, Jayanth et al. does not specifically teach the pulse signals varying according to number of pulses or duration of pulses. However, official notice is taken that such is typically how pulsed based controls are conducted (Morse code for example). It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply different numbers and durations of pulses to the pulse-based signals of Jayanth et al. for the basic purpose of differentiating among the different control signals.

Claims 26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Jayanth et al. or Saunders et al.

As per claims 26 and 29, neither Jayanth et al. nor Saunders et al. specifically teaches wireless communication. However, wireless controls are common and well known in the art of temperature regulation. It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply wireless controls to the systems of Jayanth et al. or Saunders et

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al. for the purpose of taking advantage of the well-known conveniences that such communication provides.

Allowable Subject Matter

Claim 12 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc E. Norman whose telephone number is 571-272-4812. The examiner can normally be reached on Mon.-Fri., 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Esquivel can be reached on 571-272-4808. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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MN

A handwritten signature in black ink, appearing to read 'M. Norman', is positioned above the printed name.

**MARC NORMAN
PRIMARY EXAMINER**